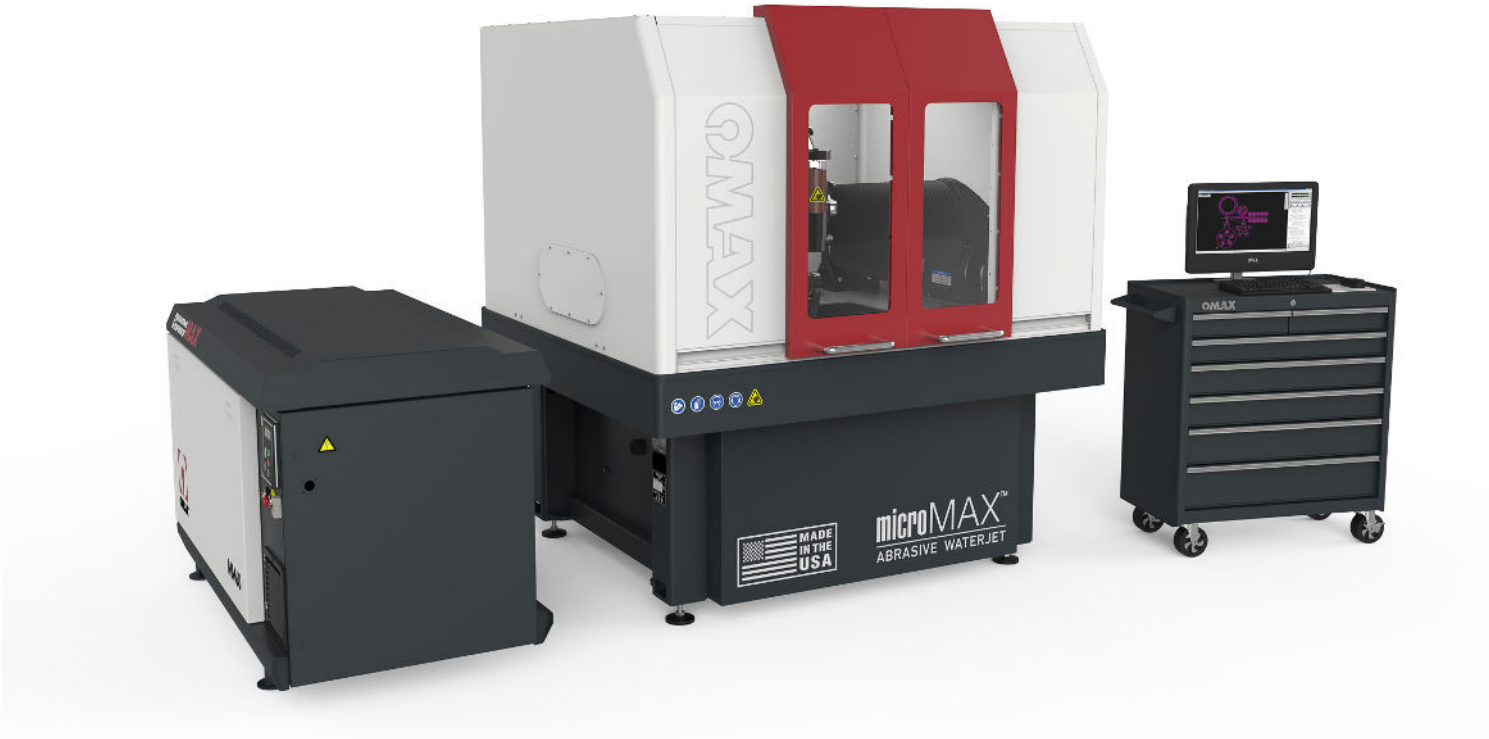
OMAX Corporation

PRECISION ABRASIVE WATERJET SYSTEMS

MICROMAX



OMAX MicroMAX JetMachining Center

The MicroMAX® JetMachining® Center is the ideal solution for ultra-precision abrasive waterjet machining. Utilizing advanced high precision linear encoders, innovative vibration isolation, and proven software control systems, the MicroMAX JetMachining Center is capable of a positioning accuracy of less than five microns while retaining all the advantages of abrasive waterjet machining. The MicroMAX JetMachining Center can machine stainless steel, titanium, carbon fiber, PEEK, glass, nitinol, graphite, copper, composites, laminates, and more, with high precision and smooth finishing, for either prototyping or production.

FEATURES & BENEFITS

- Very high precision with 0.1 micron linear optical encoder system
- Highly rigid structure with low mass bridges and carriages
- Vibration isolation of table and gantries
- Tilt-A-Jet cutting head for fast cutting with taper elimination
- All components have matched thermal expansion
- Equipped with 7/15 Mini MAXJET® 5 Nozzle
- Revolutionary patent-pending process for fine abrasive feed rate
- Full enclosure with environmental controls
- Advanced pressure controls for piercing delicate materials
- Machines a wide range of materials with high accuracy
- No heat-affected zones or mechanical stresses
- Leaves behind a satin-smooth edge, reducing secondary operations
- Stiff construction greatly reduces vibration and increases accuracy
- Easily cut non-conductive and reflective materials
- Can machine hardened steel as easily as annealed steel
- Full enclosure provides quiet and clean operation below 80db

2 limited YEAR warranty

OMAX TECHNOLOGY GUARANTEE

The OMAX Technology Guarantee entitles you, as the original owner, to free OMAX software upgrades for the life of the machine.

MADE IN THE USA

Specifications subject to change without notice.
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MACHINE DIMENSIONS

Footprint (standard layout)	10'2" x 7'2" (3.10 m x 2.18 m)
Weight (tank empty)	3,700 lb (1,678 kg)
Height (with enclosure)	7'6" (2.29 m)
Operating Weight (with water in tank)	7,372 lb (3,344 kg)

WORK ENVELOPE

X-Y Cutting Travel*	2'1" x 2'1" (0.63 m x 0.63 m)
Z-Axis Travel*	4.5" (114 mm)
Table Size	2'11" x 3'0" (0.89 m x 0.91 m)

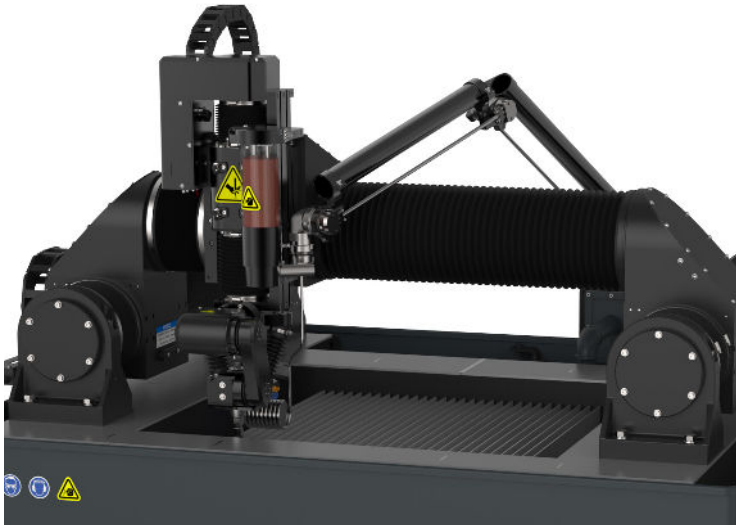
DRIVE DESCRIPTION

• Closed loop, digital drives • Brushless servo motors	• Intelli-*TRAX* drive technology with linear encoders in X-Axis • Precise Motorized Z-Axis

PUMP DESCRIPTION

Output Pressure	60,000 psi (4,100 bar)
Orifice and Flow Rate[1]	0.010" / 0.43 gpm (0.25 mm / 1.63 lpm)
Dimensions	65" x 35" x 42" (1,651 mm x 889 mm x 1,067 mm)

[1] *Recommended maximum orifice size. Smaller orifice sizes have a corresponding lower flow rate.*



STANDARD MODEL SPECIFICATIONS

Material Support Slats	4" x 11 Ga (102 mm x 2.9 mm) Galvanized Steel
Maximum Supported Material Load	400 lbs/sq ft (1,953 kg/sq meter)
Electrical Requirements	3-Phase, 380-480 VAC ±10%, 50-60 Hz
Speed	100 ipm (2.54 m/min)
Linear Axis Accuracy*	±0.0001" (±2.5 microns)
Linear Axis Repeatability*	±0.0001" (±2.5 microns)
Ballbar Circularity*	±0.0005" (±13 microns)

OPTIONAL ACCESSORIES

- Rotary Axis
- Precision Optical Locator
- Vacuum Assist Package
- Collision-Sensing Terrain Follower
- Water Recycling System
- Tank Cooling System
- MAXJET 5i Nozzle Assembly
- Variable Speed Solids Removal System
- Waterjet Brick Kit
- Material Holding Kit
- Laser Feature Finder
- Laminar Filter

*Optional accessories may reduce cutting travel. Photos may show optional accessories. For a complete list of accessories, contact an OMAX sales representative. Accuracy specifications are at 72° F (22° C) Pumps are built to meet UL and CE specifications. Contact OMAX for detailed utility requirements.

ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. OMAX engineers continue to innovate technology for abrasive waterjet machining, from proven 4th generation pump designs to cutting edge drive systems with micron-level accuracy. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

To see how a MicroMAX JetMachining Center can save you time and money, call or visit our website and request a free part analysis today.

TÜVRheinland®
ANAB ACCREDITED
c UL us LISTED CE
UL 508A, CAN/CSA C22.2 No. 14, CAN/CSA C22.2 No. 73
ISO 9001:2015 Certified

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